

The following forms or documents have also been submitted in this response:

- A transmittal form PTO/SB/21 dated September 19, 2005.
- A request for a 1 month extension of time (PTO/SB/22)
- A terminal disclaimer (PTO/SB/26).
- A check for \$120 for small entity to pay for the 1 month extension of time and the terminal disclaimer of time.
- A POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM (PTO/SB/81) to change address.
- A statement (PTO/SB/96) under 37 CFR 3.73(b) as required by the terminal disclaimer (PTO/SB/26) and Correspondence Address (PTO/SB/81). Note that the parent patent to this continuation application was already assigned and is reflected on the parent patent cover sheet, US patent 6,679,476 for CONTROL VALVES. We are not changing the assignment.
- A copy of the assignment of the parent patent as required by PTO/SB/96.

Amendments to the Claims

1. (currently amended) A shut-off valve assembly comprising:

a hollow valve body having a first opening and a second opening;

a valve seat positioned within the hollow valve body proximate to the first opening;

a first diaphragm assembly, wherein a deflectable portion of the first diaphragm assembly is attached to an interior surface of the hollow valve body forming a first volume between the valve seat and the first diaphragm assembly;

a second diaphragm attached to another portion of the

interior of the hollow valve body and attached to the first diaphragm assembly such that a second volume is defined between the second diaphragm and the second opening, wherein a third volume is formed between the first diaphragm assembly and the second diaphragm, the third volume sealed from the first volume and the second volume by the first diaphragm assembly and the second diaphragm;

at least one flow hole formed in the first diaphragm assembly, wherein the at least flow one hole allows a process flow to flow between the first volume and the second volume; and

a self-aligning head assembly comprising;

a stem attached at a first end to another portion of the first diaphragm assembly; and

a valve head coupled to a second end of the stem,

[[wherein the valve head is adapted to self-align into the valve seat with a leak rate of less than or equal to 4×10^{-9} atmosphere cc of Helium/sec]];

wherein a deflection of the deflectable portion of the first diaphragm assembly and the second diaphragm allows the other portion of first diaphragm assembly to move in order to open and close the valve head from the valve seat.